

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/855,146 | KRIARAS ET AL. | |
| | Examiner | Art Unit | |
| | Joshua Kading | 2661 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 May 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5-14-01.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.



UNITED STATES PATENT AND TRADEMARK OFFICE

25
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/855,146 | 05/14/2001 | Ioannis Kriaras | 4-13-11-9 | 1117 |

7590 08/24/2004

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
P.O. Box 3030
Holmdel, NJ 07733-3030

[REDACTED] EXAMINER

KADING, JOSHUA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| | 2661 |

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in 5 compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office 10 action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 2, and 4 are objected to because of the following informalities:

Claim 1:

- 15 Line 3, "the payload" should be replaced with --a payload--.
Line 4, "the destination identity" should be replaced with --a destination identity--.
Lines 8-9, "the mobile station input port identity" should be replaced with -- a mobile station input port identity--.
20 Line 9, "the serving general packet radio system" should be replaced with --a serving general packet radio system--.

Art Unit: 2661

Line 11, "the input port, identity in the header with the address" should be changed to --the input port identity in the header with an address--.

Line 12, "a tunnel identity" should be replaced with --the tunnel identity--.

Line 14, "network controller and acting" should be replaced with
5 --network controller acting--.

Line15, "network control" should be replaced with --network controller--.

Claim 2:

Line 3, "the passage" should be replaced with --a passage--.

Line 4, "the content" should be replaced with --content--.

10 Line 19, "the mobile system" should be replaced with --the mobile station--.

Line 20, "the SGSN" should be replaced with --an SGSN--.

Claim 4:

Line 3, "the passage" should be replaced with --a passage--.

15 Line 4, "the content" should be replaced with --content--.

Line 8, "the pathway...and the proportion of the size" should be replaced with --a pathway...and a proportion of a size--.

Appropriate correction is required.

20

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2661

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5 10 Claim 4 is rejected under 35 U.S.C. 102(e) as being anticipated by Ahopelto et al. (U.S. Patent 5,970,059).

Regarding claim 4, Ahopelto discloses "a real time data transmission method in a network including a mobile station, a radio network controller, a media gateway, a destination station and a call control system and in which the passage of a data stream 15 including a header section and payload section between the mobile station and the destination station is governed by the content of the header section, the method comprising

the step of replacing at least some of the address related material in the header section as it passes from one location in the network to another location, with internal 20 addresses related material whereby to reduce the pathway of the data stream through the network and the proportion of the size of the header section relative to the payload section (col. 9, lines 1-31 where the packet is sent to a mobile station, and is processed to support a protocol independent communication system that allows the packet to be tunneled, using internal addresses, through the backbone network to the mobile station, 25 this is further illustrated in figure 6)."

Art Unit: 2661

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over

10 Barnes et al. (U.S. Patent 6,711,147 B1) in view of Ahopelto et al.

Regarding claim 1, Barnes discloses "a real time data transmission system for uplink and downlink transmissions between a mobile station and a destination station, the mobile station in the uplink transmission adding to [a] payload data stream by generating a header containing its own identity and [a] destination identity to accompany the payload in the data stream (col. 9, lines 11-12 where the home address of the mobile represents its own identify, and although there is no mention of the destination identity there must be a destination identity during communication, for example in figure 4, elements G, F, E, D, and 276 all have their own identities, which in communication act as a destination identity), a radio network controller upon receiving the data stream adding to the header a tunnel identity obtained from a call control system to identify the data stream and then directing the data stream directly to a media gateway (col. 8, lines 63-65 where the security gateway functions as the media gateway and the GSN/HA is the network controller in the sense that it uses a tunnel to route the packet through the network)..."

Art Unit: 2661

However, Barnes lacks what Ahopelto discloses, "the media gateway in the downlink transmission receiving a data stream including a header containing the mobile station identity and [a] mobile station input port identity obtained from [a] SGSN (col. 9, lines 1-11 where the GPRS GSN acts as the media gateway the roaming number acts

- 5 as the port identity and the home number acts as the mobile's identity), the media gateway acting to replace both the mobile station identity and the input port identity in the header with [an] address of the radio network controller, the input port identity and [the] tunnel identity for identifying the data stream, all obtained from the call control system and then directing the data stream directly to the radio network controller (col. 9, lines 12-22 where encapsulating the packet in the CLNP form allows the packet to be tunneled to the radio network controller associated with the mobile station),
- 10 the radio network controller acting to replace the radio network controller address in the header with the mobile station identity address and input port identity both obtained from the call control system via the SGSN and responding to the tunnel
- 15 identity data received to identify the data stream and then to direct the data stream to a corresponding radio bearer linking it to the mobile station (col. 9, lines 23-31 where the CLNP encapsulated packet is de-encapsulated and the packet is forwarded to the mobile identified by the TLLI)."

- It would have been obvious to one with ordinary skill in the art at the time of invention to include the deficiencies of Barnes for the purpose of communicating information across different protocol networks (Ahopelto, col. 2, lines 3-12). The motivation for having a protocol independent communication system is so that data

Art Unit: 2661

formatted according to different protocols can communicate using a single backbone network, thus saving resources and money by having a single network and not several.

Regarding claim 2, Barnes discloses "a real time data transmission method in a

5 network including a mobile station, a radio network controller, a media gateway, a destination station and a call control system and in which the passage of a data stream including a header section and payload section between the mobile station and the destination station is governed by the content of the header section, the method comprising,

10 in the uplink transmission from the mobile station to the destination station, the step of adding to the header section of the data stream transmitted from the mobile station to the radio network controller, the identities of both stations (col. 9, lines 11-12 where the home address of the mobile represents its own identify, and although there is no mention of the destination identity there must be a destination identity during communication, for example in figure 4, elements G, F, E, D, and 276 all have their own identities, which in communication act as a destination identity),

15

the step of adding to the header of the data stream passing through the radio network controller a tunnel identity obtained from the call control system, the step of forwarding the data stream from the radio network controller to the media gateway (col. 8, lines 63-65 where the security gateway functions as the media gateway and the GSN/HA is the network controller in the sense that it uses a tunnel to route the packet through the network)..."

Art Unit: 2661

However, Barnes lacks what Ahopelto discloses, "in the down transmission from the destination station to the mobile station the step of adding to the header of the data stream passing from the destination station, the mobile station identity and port identity both obtained from the call control system (col. 9, lines 1-11 where the GPRS GSN acts

- 5 as the media gateway the roaming number acts as the port identity and the home number acts as the mobile's identity),

the step of replacing the mobile station identity and port identity in the header of the data stream with the radio network controller address, the input port identity and the tunnel identity for the data stream all obtained from the call control system, as the data 10 stream passes through the media gateway (col. 9, lines 12-22 where encapsulating the packet in the CLNP form allows the packet to be tunneled to the radio network controller associated with the mobile station),

- 15 the step of forwarding the data stream to the radio network controllers (figure 6, where the paths 5 and 6 show the packet being transferred through the radio network controllers or operator 2)

the step of replacing the radio network control address and port identity in the header of the data stream with the mobile system address and input port, both obtained from the call control system via the SGSN as the data stream passes through the radio network controller, and the step of directing the data stream to the mobile station (col. 9, 20 lines 23-31 where the CLNP encapsulated packet is de-encapsulated and the packet is forwarded to the mobile identified by the TLLI)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the deficiencies of Barnes for the purpose of communicating information across different protocol networks (Ahopelto, col. 2, lines 3-12). The motivation for having a protocol independent communication system is so that data 5 formatted according to different protocols can communicate using a single backbone network, thus saving resources and money by having a single network and not several.

Regarding claim 3, Barnes and Ahopelto disclose the method of claim 2. However, Barnes lacks what Ahopelto further discloses, "the step of causing the radio 10 network controller to respond to the tunnel identity data received from the call control system to identify the data stream received and to direct it along a corresponding radio bearer linking it to the mobile station (col. 9, lines 23-31 where the CLNP encapsulated packet is de-encapsulated which allows for the data stream to be identified and thusly forwarded to the mobile identified by the TLLI in the de-encapsulated packet)." It would 15 have been obvious to one with ordinary skill in the art to include the further forwarding to the mobile station for the same reasons and motivation as in claim 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-20 3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

Art Unit: 2661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (7571) 272-3079. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

- 5 Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic
- 10 Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

August 23, 2004



KENNETH VANDERPUYE
PRIMARY EXAMINER